IN THE CLAIMS:

Please ~~amend claims 1 and 9-14~~ as follows:

1. (*Currently amended*) Apparatus for determining a right or obligation of a contract or agreement at any point in time, comprising means for creating a state machine representative of said contract or agreement, at least some terms of said contract or agreement being represented as a state variable of said state machine, means for storing said state machine, the state machine having a status, means for: (a) causing the state machine to receive data representative of <u>performance of at least one of the parties of</u> one or more events relevant to the contract or agreement, (b) determining whether said event changes the status of said state machine, (c) changing the status of said state machine if required by the determination, and (d) determining the right or obligation in response to the received data and the status of the state machine.

2. (*Previously presented*) Apparatus according to claim 1, comprising means for storing a plurality of state machines, each representative of a respective contract or agreement, the right or obligation of each said contract or agreement being determinable concurrently as required.

3. (*Previously presented*) Apparatus according to claim 1, wherein a computer language for realizing the apparatus is an object-orientated computer language, such that the right or

obligation of a contract state machine object includes assertions that the object makes to other objects or systems.

4. (*Previously presented*) Apparatus according to claim **1**, including software components or systems for: (a) receiving the right or obligation assertions of a virtual contract, and (b) determining and implementing the "wishes" or "intentions" of the contracts, as required.

5. (*Previously presented*) Apparatus according to claim **1**, comprising a kernel including means for storing a plurality of contract or agreements as state machines, means for receiving information regarding events relevant to one or more of the contracts or agreements, and means for changing the state of one or more of the state machines as required according to said event.

6. (*Previously presented*) Apparatus according to claim **5**, comprising an event queue for accommodating "external" and "internal" events.

7. (*Previously presented*) Apparatus according to claim **1**, wherein if the state of a contract or agreement is not changed for a predetermined period of time, the means for storing is arranged so the contract is persisted in the storage means, to await an the occurrence of one or more events which affect its behaviour or output.

Application Serial No. 09/941,568
Docket 30012796 US (1509-215)
Page 4

8. (*Previously presented*) Apparatus according to claim **1**, further including a virtual contract manager arranged so that upon initialization, virtual contracts are registered with the virtual contract manager such that the virtual contracts can subscribe to events that affect their behaviour to the right or obligation at any given time.

9. (*Currently amended*) A method of determining a right or obligation of a contract or agreement at any point in time, the method comprising the steps of:

creating a state machine representative of said contract or agreement, at least some terms of said contract or agreement being represented by a state variable of said state machine, the state machine having a status;

storing said state machine;

receiving at said state machine data representative of performance of at least one of the parties of one or more events relevant to said contract or agreement;

determining whether said event results in a change of state of said state machine;

changing the status of said state machine accordingly; and

determining (a) the state of said state machine at a point in time as required, and (b) the right or obligation of said contract or agreement from the determined state of the state machine.

10. (*Currently amended*) Apparatus for storing electronically a plurality of contracts or agreements, each having a plurality of possible rights and obligations dependent upon an occurrence (or otherwise) of one or more events, means for receiving information relating to one or more events relevant to one or more of said contracts or agreements, and means for determining a right or obligation of one or more of said contracts in response to the occurrence (or otherwise) of said one or more events <u>representative of performance of at least one of the parties</u> of one or more events relevant to the contract or agreement.

11. (*Currently amended*) Apparatus for determining a right or obligation of an agreement, comprising:

means for creating a model representing the agreement and having an output state, the model including at least one state variable for representing a term of the agreement;

means for storing the model; and

means for (a) receiving data relevant to a term of the agreement and relating to a corresponding state variable of the model, <u>the data being representative of performance of at least one of the parties of one or more events relevant to the contract or agreement</u>, (b) entering the data into the model, (c) establishing a consequent output state of the model, and (d)

determining the right or obligation in response to the consequent output state of the model.

12. (*Currently amended*) A method of determining a right or obligation of a contract or agreement at any point in time, comprising:

representing at least some terms of said contract or agreement as a state variable of a computer arrangement, the computer arrangement having a status determined by the state variable;

causing the computer arrangement to receive data representative of <u>performance of at least one of the parties of</u> one or more elements relevant to the contract or agreement;

determining whether said event changes the status of said computer arrangement;

changing the status of said computer arrangement if required by the determination, and determining the right or obligation in response to the received data and the status of the computer arrangement.

13. (*Currently amended*) A computer program product storing a program for causing a computer arrangement to determine a right or obligation of a contract or agreement at any point in time, the computer arrangement storing at least some terms of said contract or agreement as a state variable, the computer arrangement having a

status determined by the state variable[[;]]ᵢ the program causing

the computer arrangement to:

receive data representative of <u>performance of at least one of</u>

<u>the parties of</u> one or more elements relevant to the contract or

agreement;

determine whether said event changes the status of said

computer arrangement;

change the status of said computer arrangement if required by

the determination; and

determine the right or obligation in response to the received

data and the status of the computer arrangement.

14. (*Currently amended*) A computer arrangement for determining

a right or obligation of a contract or agreement at any point in

time, the computer arrangement being arranged for executing the

steps of:

representing at least some terms of said contract or agreement

as a state variable[[;]]ᵢ the computer arrangement having a status

determined by the state variable;

causing the computer arrangement to receive data representative

of <u>performance of at least one of the parties of</u> one or more

elements relevant to the contract or agreement;

determining whether said event changes the status of said

computer arrangement;

changing the status of said computer arrangement if required by the determination; and

determining the right or obligation in response to the received data and the status of the computer arrangement.

15. (*Previously presented*) The apparatus of claim **1**, wherein the status is determined by the state variable.

16. (*Previously presented*) The apparatus of claim **1**, wherein the contract or agreement is in force.

17. (*Previously presented*) The method of claim **9**, wherein the status is determined by the state variable.

18. (*Previously presented*) The method of claim **9**, wherein the contract or agreement is in force.